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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/027,225

12/26/2001

John K. Hewitt

N8097

9361

7590

04/29/2004

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EXAMINER

PREVIL, DANIEL

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/027,225

**Applicant(s)**

HEWITT ET AL.

**Examiner**

Daniel Previl

**Art Unit**

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This action is responsive to communication filed on December 11, 2003.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the container" in line 7, there is insufficient antecedent basis for this limitation in the claim.

Claims 2-8 are rejected for the same reason since they depend from a rejected claim.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Max R. Uhlig (US 3,200,388).

Regarding claims 9, Uhlig discloses a water ionization switch for detecting the presence of water (fig. 2; col. 2, lines 1-12) comprising: a container 10 with an interior (fig. 1); a first electrode 12 contained within the interior (fig. 1, ref. 12); a second electrode 13 spaced from the first electrode such that the electrodes do not make direct electrical contact (fig. 1); and an electrolyte contained within interior and constrained only by the container, the electrolyte and volume of the interior proportionally related (accumulation of water) (col. 3, lines 1-45) such that the introduction of water into the interior of the container results in the formation of a conducting aqueous solution between the electrodes (fig. 2, ref. 12-13, col. 2, lines 11-49).

Although, Max R. Uhlig discloses every feature of the claimed invention but fails to specify that the container including at least one cover defining openings allowing water penetration of the interior of the container. Since Uhlig clearly discloses a cover to allow a water entry and accumulation of water in the receptacle 11. It would have been obvious to any skill artisan at the time the invention was made to recognize that the cover must have a plurality of openings to permit water penetration in which appropriate actions could immediately be taken to stop water flooding.

Regarding claim 10, Max R. Uhlig discloses a water ionization switch the container including a two-inch diameter housing manufactured from a non-conductive material (fig. 2; col. 2, lines 28-38).

Regarding claim 11, Max R. Uhlig teaches a container shaped in a configuration selected from a configuration group including square, rectangular (fig. 1).

Regarding claim 12, Max R. Uhlig teaches a woven material mesh to allow for water entry. (machine 10 has a cover) (fig. 1).

Regarding claim 13, Max R. Uhlig discloses the electrodes 12, 13, mounted through a side of the container (fig. 1)

Regarding claim 14, the above combination fails to explicitly mention 40% of the mass of the element to form the conduction solution. It is an obvious design choice to use approximately 40% of the mass of the electrolyte to form the conductive solution. Any skill artisan at the time the invention was made would have recognized the desirability of using any amount of the mass of the element to form the conductive solution to detect water leak into the container.

Regarding claim 15, Max R. Uhlig teaches the electrolyte is non-conductive while dry (col. 2, lines 27-38).

Regarding claim 16, Max R. Uhlig teaches sodium chloride (col. 2, line 35).

***Allowable Subject Matter***

2. Claims 1-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

3. The following is a statement of reasons for the indication of allowable subject matter: In combination with all the limitations in the claim, the prior arts fail to teach or make obvious: a controlled valve assembly connected to the power supply and the ionization switch, wherein the valve assembly stops the flow of water in response to a change in the direct current electrical signal.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jarvis et al. (US 4,591,838) discloses an spillage detector for liquid chromatography systems.

Hanson (US 4,888,455) discloses a water leak detector and method therefore.

Welch, Jr. et al. (US 5,357,241) discloses a fail-safe leak detector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Previl whose telephone number is 703 305-1028. The examiner can normally be reached on Monday-Thursday. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 703 305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

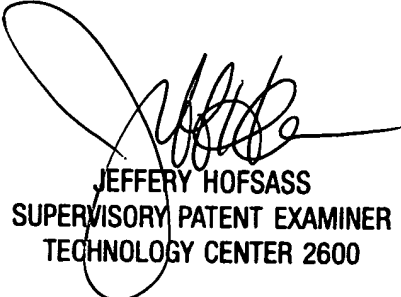
Daniel Previl

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Examiner  
Art Unit 2636

DP  
April 19, 2004.



JEFFERY HOFSSASS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600